



# *COMMONWEALTH of VIRGINIA*

## *DEPARTMENT OF ENVIRONMENTAL QUALITY*

Permit No. VA0088331

Effective Date:	May 2, 2005
Administrative Authorization Date:	August 31, 2009
Expiration Date:	May 1, 2010

**ADMINISTRATIVE AUTHORIZATION TO PRODUCE OR DISTRIBUTE RECLAIMED WATER  
UNDER THE WATER RECLAMATION AND REUSE REGULATION ATTENDING AN  
AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE  
ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW**

In compliance with the provisions of the Water Reclamation and Reuse Regulation (9VAC25-740-10 et seq.), the following permittee is administratively authorized to produce or distribute reclaimed water in accordance with the information contained in the permit application, the Water Reclamation and Reuse Addendum to an Application, this administrative authorization cover page, and the standards and conditions as set forth herein.

This administrative authorization shall remain in effect until expiration of the above permit for the discharge, at which time the standards and conditions of the administrative authorization shall be incorporated into the permit or eliminated.

Permittee:	New Kent County
Facility Name:	Parham Landing WWTP
County:	New Kent
Facility Location:	7800 Parham Landing Road, West Point, VA 23181

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Deputy Regional Director, Piedmont Regional Office  
Department of Environmental Quality

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Date

A. STANDARDS AND MONITORING REQUIREMENTS

1. Level 1 for irrigation and dust suppression reuse:

- a. During the period beginning with the issuance of a Certificate to Operate (CTO) for the reclamation system and ending with the permit expiration date, the permittee is required to monitor pollutants in the reclaimed water as described below for reuses specified in the Reclaimed Water Management Plan:

Parameters	Standard <sup>(1)</sup>	Units	Frequency	Sample Type
001 Reclamation System Flow <sup>(9)</sup>	Monthly average: NL	MGD	Continuous	TIRE
	Monthly maximum: NL	MGD	Continuous	TIRE
002 pH <sup>(6)</sup>	6.0 – 9.0	Standard Units	Daily	Grab
012 Total Phosphorus	NL	mg/l	1/Week	24 HC
013 Total Nitrogen	NL	mg/l	1/Week	24 HC
120 Enterococci <sup>(2)</sup>	Monthly Geometric mean <sup>(3)</sup> : $\leq 11$	Colonies/100 ml	Daily <sup>(4)</sup>	Grab
	CAT: 24	Colonies/100 ml	Daily <sup>(4)</sup>	Grab
157 Total Residual Chlorine (TRC) <sup>(5)</sup>	NL	mg/l	Continuous	Recorded
	CAT: $< 1.0$	mg/l	Continuous	Recorded
159 cBOD <sub>5</sub>	Monthly average: $\leq 8.0$	mg/l	5 days/Week	24 HC
164 Influent Flow <sup>(10)</sup>	Monthly average: NL	MGD	Continuous	TIRE
	Monthly maximum: NL	MGD	Continuous	TIRE
798 Turbidity <sup>(7)</sup>	Daily average <sup>(8)</sup> : $\leq 2.0$	NTU	Continuous	Recorded
	CAT: $> 5.0$	NTU	Continuous	Recorded

NA = not applicable

CAT = corrective action threshold

MGD = million gallons per day

24 HC = 24 hour composite sample

NL = no limit

NTU = nephelometric turbidity unit

TIRE = totalizing, indicating, and recording equipment

- (1) With the exception of turbidity, standards must be met at the point of compliance (POC) designated as internal Outfall No. 650.

The POC shall be just upstream of disinfection for turbidity, at the end of the contact tank or contact period for total residual chlorine, and as specified in the approved operations and maintenance manual of the reclamation system for all other standards.

- (2) After disinfection.
  - (3) For the purpose of calculating the geometric mean, bacterial analytical results below the detection level of the analytical method used shall be reported as values equal to the detection level.
  - (4) For reclamation systems treating municipal wastewater, bacterial samples shall be collected between 10:00 a.m. and 4:00 p.m. to coincide with peak flows to the reclamation system.
  - (5) TRC is measured after a minimum contact time of 30 minutes at or below average flow or 20 minutes at peak flow, as described above in footnote 4. Sampling and analysis for TRC shall be continuous online monitoring at the end of the contact tank, equipped with an automated data logging or recording device and an alarm to notify the operator when the CAT for the disinfectant has been reached. See Part B.5 for additional information regarding turbidity monitoring.
  - (6) A pH meter shall be used for all pH analysis of reclaimed water.
  - (7) Turbidity analysis shall be performed by a continuous, on-line turbidity meter equipped with an automated data logging or recording device and an alarm to notify the operator when the CAT for turbidity in the standard for Level 1 has been reached. Compliance with the average turbidity standard shall be determined daily, based on the arithmetic mean of hourly or more frequent discrete measurements recorded during a 24-hour period. See Part B.5 for additional information regarding turbidity monitoring.
  - (8) Daily average is the arithmetic mean of hourly or more frequent discrete turbidity measurements recorded during a 24-hour period.
  - (9) The designated design capacity for the reclamation system is 2.0 MGD.
  - (10) Influent flow shall be monitored at the head of the wastewater treatment works that will divert source water or effluent to the reclamation system.
  - (11) There shall be no nutrient management requirements for irrigation reuse of the reclaimed water produced by the reclamation system and provided by the reclaimed water distribution system based on an annual average concentration of total nitrogen (N) and total phosphorus (P) = 8.0 and = 1.0 mg/l, respectively. Annual average concentrations of total N and total P shall be the arithmetic mean of the monthly average concentrations of these nutrients for the most recent 12 consecutive months of monitoring.
- b. Results for the above parameters shall be included in the monthly monitoring report submitted to the DEQ Piedmont Regional Office by the 10th of each month for the preceding month's performance.

**B. Special Conditions**

1. The following are prohibited:
  - a. Direct potable reuse;
  - b. The reuse of reclaimed water for any purpose inside a residential or domestic dwelling or a building containing a residential or domestic unit;
  - c. The reuse of reclaimed water to fill residential swimming pools, hot tubs or wading pools;
  - d. The reuse of reclaimed water for food preparation or incorporation as an ingredient into food or beverage for human consumption;
  - e. Bypass of untreated or partially treated wastewater from the reclamation system or any intermediate unit process to the point of reuse unless the bypass complies with standards and requirements specified in this authorization and is for essential maintenance to assure efficient operation; and
  - f. The return of reclaimed water to the reclaimed water distribution system after the reclaimed water has been delivered to an end user.
2. There shall be no nuisance conditions (e.g., ponded water that attracts mosquitoes or other vectors; strong odors that the Department determines are the subject of frequent and wide spread complaints from the surrounding community; any condition determined by a court of law to be a nuisance condition) resulting from the distribution, use or storage of reclaimed water.
3. The Board may modify or revoke and reissue this authorization if any applicable standards or requirements for water reclamation and reuse pursuant to the State Water Control Law or regulations there under, and including the Water Reclamation and Reuse Regulation (9VAC25-740), are more stringent than or are in addition to any standards or requirements for water reclamation and reuse contained in this authorization.
4. Discharge of reclaimed water from the reclamation system to a reclaimed water distribution system, a non-system storage facility or directly to a reuse of the reclaimed water at any time for any duration within a monthly reporting period, shall require monitoring in accordance with Part A and submittal of a monthly monitoring report for the discharge.
5. Should reclaimed water reach the corrective action threshold (CAT) for turbidity or TRC specified in Part A of this authorization, the operator of the reclamation system shall immediately initiate a review of treatment operations and data to identify the cause of the CAT monitoring results to bring the reclaimed water back into compliance with the standards. Resampling or diversion shall occur within one hour of first reaching the CAT. Procedures for resampling, operational review and diversion shall be as described in the approved operations and maintenance manual for the reclamation system. If subsequent monitoring results of the resamples collected within one hour of the first CAT monitoring results for turbidity or TRC continue to reach the CAT, the reclaimed water shall be considered substandard or reject water and shall be diverted to either storage for subsequent additional treatment or retreatment. If the reclamation system is unattended, the diversion of reject water shall be initiated and performed with automatic equipment. There shall be no automatic restarts of distribution to reuse until the treatment problem is corrected. Failure to divert the substandard or reject water after one hour of CAT monitoring results shall be considered a violation of this permit. Upon resuming discharge of reclaimed water to the reclaimed water distribution system for which the CAT was reached, resampling for turbidity or TRC, as applicable, shall occur within one hour to verify proper treatment.
6. Should the reclaimed water reach the CAT for enterococci specified in Part A of this authorization for Level 1 reclaimed water, the operator of the reclamation system shall immediately initiate a review of treatment operations and data to identify the cause of the CAT monitoring results to bring the reclaimed water back into compliance with the standards. Procedures for operational review shall be

as described in the approved operations and maintenance manual for the reclamation system. Two consecutive bacterial monitoring results that reach the CAT of the standards shall be considered a violation of this permit.

7. Failure to resample after determination that monitoring results are not in compliance with the CAT standards for reclaimed water in Part A, or to divert or discharge substandard or reject water in accordance with Part B.5 shall be deemed a violation of this permit.
8. Should the on-line turbidity meter for the reclamation system go out of service for either planned or unplanned repair, samples shall be manually collected for turbidity analysis at no less than four-hour intervals up to a maximum of five days. Following the period of repair (not to exceed five days), continuous, on-line monitoring with a turbidity meter shall resume. Should on-line disinfection monitoring equipment go out of service for either planned or unplanned repair, the permittee shall be allowed to manually collect samples for disinfectant analysis at no less than four-hour intervals up to a maximum of five days. Following the period of repair (not to exceed five days), continuous, on-line disinfectant monitoring shall resume.
9. The classification of the operator for the reclamation system is Class II. The permittee shall employ or contract at least one operator who holds a current Class II license and the license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the DEQ Piedmont Regional Office in writing when compliance with this requirement is not being achieved or it is anticipated that compliance with this requirement will not be achieved. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

The reclamation system shall be manned while in operation and under the supervision of the Class II operator unless the system is equipped with remote monitoring and, as applicable, automated diversion of substandard or reject water in accordance with Part B.5.

10. Within 90 days of placing the new reclamation system into operation, the permittee shall submit to the DEQ Piedmont Regional Office changes to the operations and maintenance (O&M) manual for the Parham Landing WWTP addressing the operation and maintenance of the reclamation system. These changes shall reflect the practices and procedures followed by the permittee to ensure compliance with the permit. Upon approval, these changes to the O&M manual shall be incorporated into the existing document and be an enforceable part of the permit. The permittee shall maintain the manual, and any changes in the practices and procedures followed by the permittee shall be documented and submitted to the DEQ Piedmont Regional Office for approval within 90 days of the effective date of the changes

The operations and maintenance manual shall be maintained on site at the Parham Landing WWTP and the new distribution system (10600 Horseman's Trail, Providence Forge) and shall, at a minimum, contain the following related to the operations and maintenance of the reclamation and distribution system:

- a. A description of unit treatment processes within the reclamation system and step-by-step instructions for the operation of these processes;
- b. A description of all appurtenances associated with the reclamation system (i.e., storage facilities, etc.), step-by-step instructions for their operation, and a description of their maintenance;
- c. Routine maintenance and schedules of maintenance for each unit treatment process in the system;
- d. The criteria and equipment used to make continuous determinations of the acceptability of the reclaimed water being produced and alarm set points for parameters measured by continuous on-line monitoring equipment;

- e. Descriptions of the following that shall comply with the standards and conditions of this authorization:
  - (1) Reclaimed water sampling and monitoring procedures and equipment. This shall include, but is not limited to, a description of sample handling, preservation and chemical analyses; and calibration and schedules of calibration for monitoring equipment;
  - (2) The sampling location for the point of compliance; and
  - (3) Control system, alarm functions, record keeping and reports;
- f. Hours of reclamation system operation, hours that the system will be staffed, procedures to be followed by the staff during a period when a licensed operator in responsible charge is not present at the system, and training of the staff regarding operation and maintenance of the system;
- g. The physical steps and procedures to be followed by the operator when substandard water is being produced, including resampling and operational review required in accordance with Part B.5 and 6 of this authorization;
- h. The physical steps and procedures to be followed by the operator when the treatment works returns to normal operation and acceptable quality reclaimed water is again being produced;
- i. Responsible officials and their duties, roles and contact information;
- j. Procedures necessary for the proper management of sludge and residuals from reclamation treatment.
- k. A contingency plan to eliminate or minimize the potential for untreated or inadequately treated water to be delivered to reuse areas. The plan shall include, among other things:
  - (1) Identifying persons responsible for implementing the contingency plan and their contact information;
  - (2) Reference and be coordinated with the education and notification program contained in the approved RWM Plan for any release of untreated or inadequately treated water to the reclaimed water distribution system;
- l. Location of back up or replacement parts critical to the operation of unit treatment processes within the reclamation system;
- m. A list of chemicals and materials in storage areas and the location of storage areas; and
- n. A plan for inactivation or closure of the reclamation system specifying what steps will be taken to protect the environment and public health. If the permittee plans an expansion or upgrade to replace the existing water reclamation system or satellite reclamation system, or if the facility is permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing water reclamation system and satellite reclamation system, where applicable. The plan shall address the following information at a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal, and final disposition of residual reclaimed water, solids, and waste products; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation."

- o. The operations and maintenance manual for the reclaimed water distribution system shall, at a minimum, contain the following:
  - (1) A description of all components within the distribution system and step-by-step instructions for the operation of specific mechanical components;
  - (2) Routine and unplanned inspection of the distribution system, including required inspections for the cross-connection and backflow prevention program contained in the approved RWM Plan;
  - (3) Routine maintenance and schedules of maintenance for all components of the distribution system. Maintenance shall include, but is not be limited to, initial and routine flushing of the distribution system, measures to prevent or minimize corrosion, fouling and clogging of distribution lines; and detection and repair of broken distribution lines, flow meters or pumping equipment.
  - (4) Procedures to handle and dispose of any wastes or wastewater generated by maintenance of the distribution system in a manner protective of the environment (Wastewater from flushing shall not be discharged to the surface waters unless otherwise authorized by DEQ. Introduction of chemicals not identified in the application is prohibited unless authorized by DEQ prior to use);
  - (5) A plan for inactivation or closure of the reclaimed water distribution system specifying what steps will be taken to protect the environment and public health; and
  - (6) A protocol that addresses the situation where reclaimed water from the reclaimed water distribution system is found to be non compliant with the standards required for the intended reuse(s) of that water.
- 11. When the annual average concentration of total nitrogen (N) or total phosphorus (P) in the reclaimed water exceeds 8.0 mg/l or 1.0 mg/l, respectively, for the preceding calendar year (January through December), a written notice of such nutrient reduction failure and a plan of action for ensuring the reclamation system achieves BNR treatment of the reclaimed water shall be submitted by the permittee to the DEQ, Piedmont Regional Office for review and approval. The written notice shall be submitted by February 1 and the plan of action shall be submitted no later than April 1. The plan of action shall include the necessary steps and a prompt schedule of implementation for the reclamation system to achieve BNR treatment. Upon its approval, said plan and schedule shall become a part of and enforceable under the provisions of this permit. Failure to submit the required notice or failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.
- 12. All storage facilities of reject water and reclaimed water (system and non-system), including landscape impoundments used for non-system storage of reclaimed water, shall be designed and operated to prevent a discharge to surface waters of the state except in the event of a storm greater than the 25-year 24-hour storm.
- 13. The permittee shall maintain a minimum freeboard of two feet at all times in the reject water and system storage facilities. Non-compliance with the minimum two-foot freeboard requirement at any time shall be reported orally and in writing by the permittee to the DEQ Piedmont Regional Office in accordance with Part II.I of the VPDES permit associated with this administrative authorization.
- 14. If the Parham Landing WWTP receives wastewater from a Significant Industrial User (SIU), the permitted reclamation system shall not be authorized to produce reclaimed water treated to Level 1 or for reuse in areas accessible to the public or where human contact with the reclaimed water is likely, unless the wastewater treatment works that provides effluent to the reclamation system has an approved program to manage pollutants of concern discharged by SIUs, equivalent to a pretreatment program required in the VPDES Permit Regulation for qualifying POTWs. If Parham Landing WWTP receives wastewater from a SIU and does not have an approved program, the permittee shall submit to the DEQ Piedmont Regional Office for review and approval a program for the wastewater treatment

works prior to producing reclaimed water of the quality and for the reuses described above.

15. Tank trucks used to distribute reclaimed water shall:
  - a. Be clearly labeled to identify the contents of the truck as non-potable water;
  - b. Not transport potable water used for drinking water or food preparation;
  - c. Not transport reclaimed water that does not meet the standards specified in Part A of this authorization unless the truck has been evacuated and properly cleaned prior to the addition of the reclaimed water; and
  - d. Not be filled through on-board piping or removable hoses that may subsequently be used to fill tanks with water from a potable water supply.
16. The reclaimed water distribution system shall be maintained to minimize losses, ensure structural integrity of the system, enable inspection, maintenance, and testing and to ensure safe and reliable conveyance of reclaimed water, such that the reclaimed water in the distribution system will not come in contact with or otherwise contaminate a potable water system, and the reclaimed water will not be degraded to a quality that violates the standards in this authorization for the intended reuses of the reclaimed water specified in the approved Reclaimed Water Management (RWM) Plan. Furthermore, reclaimed water shall not be returned to the reclaimed water distribution system after the reclaimed water has been delivered to the end user.
17. A current inventory of reject water storage, system storage and non-system storage facilities located within the service area of the approved RWM plan shall be maintained. For the addition of new storage facilities to the inventory after administrative authorization of the permit, the permittee shall submit to the DEQ Piedmont Regional Office an amended inventory at least 30 days before reclaimed water will be introduced into the new storage facilities. An inventory of reject water storage, system storage and non-system storage facilities shall include the following:
  - a. Name or identifier for each storage facility,
  - b. Location of each storage facility (including latitude and longitude at the center of the storage facility, to the nearest second),
  - c. Function of each storage facility (i.e., reject water storage, system storage or non-system storage),
  - d. Type of each storage facility (i.e., covered tank, uncovered tank, lined pond, unlined pond, etc.), and
  - e. Location (latitude and longitude, to the nearest second) and distance of the nearest potable water supply well and spring, and public water supply intake, to each storage facility within 450 feet of that facility.
18. A preliminary engineering report shall be submitted for new reclamation system, satellite reclamation system or reclaimed water distribution system projects; or for the modification or expansion of the same facilities where they already exist. At the request of the permittee, the DEQ Piedmont Regional Office may waive the need for a preliminary engineering report or portions of a preliminary engineering report for modification or expansion of an existing reclamation system, satellite reclamation system or reclaimed water distributions system based on the scope of the proposed project.
19. The permittee shall not cause or allow the construction, expansion or modification of a reclamation system or satellite reclamation system except in compliance with a certificate to construct (CTC) issued by DEQ. Furthermore, the permittee shall not cause or allow any reclamation system or satellite reclamation system to be operated except in compliance with a certificate to operate (CTO) issued by DEQ. DEQ may waive the need for a CTC or CTO for system modifications on a case-by-



case basis. Conditions may be imposed on the issuance of any CTC or CTO, and no reclamation system or satellite reclamation system may be constructed, modified, or operated in violation of these conditions.

20. There shall be no uncontrolled public access to the reclamation system or system storage facilities. System storage ponds shall be enclosed with a fence or otherwise designed with appropriate features to discourage the entry of animals and unauthorized personnel.
21. For all reuses of reclaimed water treated to Level 1, advisory signs or placards shall be posted within and at the boundaries of reuse areas. Each sign shall state, at a minimum, "CAUTION: RECLAIMED WATER – DO NOT DRINK" and have the equivalent standard international symbol for non potable water. The size of the sign and lettering used shall be such that it can be easily read by a person with normal vision at a distance of 50 feet. Alternative signage and wording that assures an equivalent degree of public notification and protection may be acceptable, upon prior approval by the DEQ Piedmont Regional Office.
22. All reclaimed water piping shall state, at a minimum, "CAUTION: RECLAIMED WATER – DO NOT DRINK." All visible above-ground portions of the reclaimed water distribution system including reclaimed water piping, valves, outlets (including fire hydrants) and other appurtenances shall be marked to notify the public and employees that the source of water is reclaimed water, not intended for drinking or food preparation. Each mechanical part of a reclaimed water distribution system shall be colored purple and legibly marked "RECLAIMED WATER" to identify it as a part of the reclaimed water distribution system separate from a potable water or wastewater system. Valve boxes for reclaimed water distribution systems shall be purple. Use of above-ground hose bibs, spigots or other hand operated connections that are standard on local potable water distribution systems shall be prohibited for use on the local reclaimed water distribution system.
23. Advisory signs shall be posted adjacent to impoundments or ponds, including landscape impoundments, used for non-system storage of reclaimed water.
24. All irrigation reuses of reclaimed water shall be supplemental irrigation, which in combination with rainfall, meets but does not exceed the water necessary to maximize production or optimize growth of the irrigated vegetation. For all bulk irrigation reuse sites identified in the reclaimed water management plan for the permitted reclamation system and reclaimed water distribution system, the rate of supplemental irrigation shall be calculated for every day that irrigation with reclaimed water occurs.

Where it is demonstrated by the permittee or an end user other than the permittee that salts will accumulate or have accumulated in the soil of an irrigation reuse site to concentrations that adversely affect the productivity or growth of the irrigated vegetation, and the application of reclaimed water will not contribute or has not contributed significantly to the salt problem, an additional volume of reclaimed water less than or equal to 10% of the water lost to evapotranspiration by the irrigated vegetation may be used for leaching and shall be included in the calculation of supplemental irrigation. Where it is demonstrated by the permittee or an end user other than the permittee that salts will accumulate or have accumulated in the soil of an irrigation reuse site to concentrations that adversely affect the productivity or growth of the irrigated vegetation, and the application of reclaimed water will contribute or has contributed significantly to the salt problem, no additional reclaimed water shall be applied for the purpose of leaching salts from the soil at the site. Any additional volume of water required for leaching that is not or can not be reclaimed water (e.g., rainwater, potable water, etc.) shall be included in the calculation of supplemental irrigation.

25. For all irrigation reuses of reclaimed water, the following shall be required:
  - a. There shall be no application of reclaimed water to the ground when it is saturated, frozen or covered with ice or snow, and during periods of rainfall.
  - b. The chosen method of irrigation shall minimize human contact with the reclaimed water.

- c. Reclaimed water shall be prevented from coming into contact with drinking fountains, water coolers, or eating surfaces.
26. For bulk irrigation reuse of reclaimed water, the following shall be required:
- a. Irrigation systems shall be designed, installed and adjusted to:
    - 1. Provide uniform distribution of the reclaimed water over the irrigation site,
    - 2. Prevent ponding or pooling of reclaimed water at the irrigation site,
    - 3. Facilitate maintenance and harvesting of irrigated areas and precludes damage to the irrigation system from the use of maintenance or harvesting equipment,
    - 4. Prevent aerosol carry-over from the irrigation site to areas beyond the setback distances described in Part B.28, and
    - 5. Prevent clogging from algae or suspended solids.
  - b. All pipes, pumps, valve boxes and outlets of the irrigation system shall be designed, installed, and identified in accordance with 9VAC25-740-110.B.
  - c. Any reclaimed water runoff shall be confined to the irrigation reuse site.
27. Overspray of surface waters, including wetlands, from irrigation or other reuses of reclaimed water is prohibited.
28. For sites irrigated with reclaimed water meeting a minimum of Level 1 standards contained in Part A of this authorization, the following setback distances are required:
- a. Potable water supply wells and springs, and public water supply intakes 100 feet
  - b. Non-potable water supply wells 10 feet
  - c. Limestone rock outcrops and sinkholes 50 feet
- No setback distances are required from occupied dwellings and outdoor eating, drinking and bathing facilities. However, aerosol formation shall be minimized within 100 feet of occupied dwellings and outdoor eating, drinking and bathing facilities through the use of low trajectory nozzles for spray irrigation, above-ground drip irrigation, or other means. Application of reclaimed water shall not occur during winds of sufficient strength to cause overspray or drifting of aerosols into or beyond the buffer zones.
29. For irrigation reuses where more than one setback distance may apply, the greater setback distance shall govern.
30. Unless specifically stated otherwise, all setback distances shall be measured horizontally.
31. Where treatment of the reclaimed water fails more than once during a seven-day period to comply with Level 1 disinfection standards contained in Part A. of this authorization for the protection of human health, and the non-compliant reclaimed water has been discharged to the reclaimed water distribution system, the permittee shall notify the end user in accordance with the permittee's approved education and notification program of the treatment failures and advise the end user of precautions to be taken to protect public health when using the reclaimed water in areas accessible to the public or where human contact with the reclaimed water is likely. These precautions shall be implemented for a minimum of seven days, but shall be implemented for greater than seven days when the frequency and/or magnitude of the treatment failure warrants extended precautions to protect public health. Where reclaimed water service to end users will be interrupted due to planned causes, such as

scheduled repairs, the permittee shall provide advance notice to end users of the anticipated date and duration of the interrupted service. Where reclaimed water service to end users is disrupted by unplanned causes, such as an upset at the reclamation system, the permittee shall notify end users and the affected public of the disrupted service if it can not or will not be restored within eight hours of discovery.

The permittee shall also describe and report all notifications of end users and the affected public for causes described above in accordance with Part B.33.

32. For the addition of new end users not contained in the original reclaimed water management (RWM) plan submitted with the application for a permit, the permittee shall submit to the DEQ Piedmont Regional Office an amendment to the RWM plan identifying new end users not less than 30 days prior to connection and reclaimed water service to these users. For each new end user, the permittee shall also provide all applicable information required by the Water Reclamation and Reuse Application Addendum. Should the addition of new end users indicate the need for new or different reclaimed water standards, monitoring requirements and/or conditions, this authorization may be modified or alternatively revoked and reissued to incorporate appropriate limitations or controls prior to distributing reclaimed water to the new end users.
33. For each interruption or loss of reclaimed water supply, the permittee shall report to the DEQ Regional Office in writing the following information by the 10<sup>th</sup> of the month following the month in which the interruption or loss of reclaimed water supply occurs:
  - a. The service area affected by the interruption or loss of reclaimed water supply;
  - b. The initial date and time of the interruption or loss of reclaimed water supply and duration;
  - c. The cause of interruption or loss of reclaimed water supply, additionally indicating whether the cause was planned or unplanned;
  - d. If the interruption was unplanned, describe the steps taken to correct the problem and to prevent the problem from recurring; and
  - e. A description of any notification provided in accordance with the notification components of the approved Reclaimed Water Management Plan.

Each discharge of any untreated or partially treated water to the service area of intended reuse that fails to comply with reclaimed water standards contained in Part A shall be reported by the permittee as a noncompliance in accordance with Part II.I of the VPDES permit associated with this administrative authorization.

34. In addition to records specified in Part II.B of the VPDES permit associated with this administrative authorization, the permittee shall maintain the following at the reclamation system for the period specified in Part II.B:
  - a. Water reclamation and reuse operating records to include all analyses required for reclaimed water in Part A of this authorization, records of operational problems, alarm failures, unit process and equipment breakdowns, diversions to reject storage or emergency storage, discharge to another permitted reuse system requiring a lower level of treatment, or disposal via a permitted effluent discharge; and all corrective or preventive action taken.
  - b. A monthly summary of the operating records specified in a. of this condition.
35. The permittee shall submit an annual report for the reclaimed water distribution system covering a 12-month period from January 1 through December 31 to the DEQ Piedmont Regional Office on or before February 10 of the following year. The annual report shall, at a minimum, include:
  - a. The estimated volume of reclaimed water distributed to the service area of the RWM plan, reported as monthly totals.

- b. A summary of ongoing education and notification program activities. The summary shall include, at a minimum:
    - (1) A narrative description of the modes of communication used, and summary of permittee activities, to educate and inform the public; including, minutes and attendance lists of any informational meetings held; estimates of the number and titles of written information or publications distributed; dates and content summaries of associated news media (i.e., newspaper, radio, television, or the internet) releases, articles, or reports; and dates and locations of new postings of advisory signs.
    - (2) The number and duration of notifications to end users per month performed in accordance with Part B.31 of this authorization.
36. The permittee shall implement the approved Reclaimed Water Management (RWM) Plan. Any changes to the RWM Plan shall be documented and submitted for DEQ Piedmont Regional Office staff approval within 30 days of the effective date of the changes. Upon written approval, the revised RWM Plan will become an enforceable part of the permit.